

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (canceled)
2. (previously presented) The method of claim 17, wherein the scheduled duration is an integer multiple of a minimum scheduled duration.
3. (currently amended) The method of claim 17, wherein the scheduled duration is less than or equal to a scheduling period, the scheduling period is an interval of time after [[which]] a scheduler makes a scheduling decision.
4. (original) The method of claim 3, wherein the scheduling period is variable.
5. (original) The method of claim 3, wherein the scheduled duration is variable.
6. (previously presented) The method of claim 4, wherein the scheduled rate is variable.
7. (original) The method of claim 5, wherein the scheduled duration is based on priority of a station.
8. (original) The method of claim 5, wherein the scheduled duration is based on a maximum supportable rate.
9. (original) The method of claim 8, wherein the scheduled duration is the longest possible duration for the maximum supportable rate.
10. (original) The method of claim 5, wherein the scheduled duration is based on an estimate of amount of data in the buffer.
11. (original) The method of claim 7, wherein the priority of the station is based on channel conditions.
12. (original) The method of claim 7, wherein the priority of the station is based on an estimate of the amount of data in the buffer.
13. (original) The method of claim 7, wherein the priority of the station is based on the rate requested.
14. (original) The method of claim 7, wherein the priority of the station is based on throughput allocated.

15. (original) The method of claim 7, wherein the station is a mobile station.

16. (currently amended) A method of scheduling, comprising:

receiving a rate request;

transmitting a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and
receiving data for the scheduled duration at the scheduled rate,
wherein the scheduled duration is less than or equal to a scheduling period, the scheduling period being an interval of time after transmission of [[which]] the rate assignment is made.

17. (currently amended) A method of transmitting data, comprising:

transmitting a [[rate]] request for a rate if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested;

receiving a rate assignment responsive to the [[rate]] request for the rate, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and

transmitting data, the transmitting responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate.

18. (currently amended) An apparatus for scheduling data transmissions, comprising:

means for receiving a rate request;

means for transmitting a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and

means for receiving data for the scheduled duration at the scheduled rate,

wherein the scheduled duration is less than or equal to a scheduling period, the scheduling period being an interval of time after transmission of [[which]] the rate assignment is made.

19. (currently amended) An apparatus for transmitting data, comprising:

means for transmitting a [[rate]] request for a rate if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested;

means for receiving a rate assignment responsive to the [[rate]] request for the rate, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and

means for transmitting data, the transmitting responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate.

20. (canceled)

21. (currently amended) A computer-readable medium embodying a program of instructions executable by a processor to perform a method of transmitting data, comprising:
transmitting a [[rate]] request for a rate if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested;

receiving a rate assignment responsive to the [[rate]] request for the rate, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and

transmitting data, the transmitting responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate.

22. (currently amended) A computer-readable medium embodying a program of instructions executable by a processor to perform a method of scheduling data transmissions, comprising:

receiving a rate request;

transmitting a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and

receiving data for the scheduled duration at the scheduled rate,

wherein the scheduled duration is less than or equal to a scheduling period, the scheduling period being an interval of time after transmission of [[which]] the rate assignment ~~is~~ made.

23. (previously presented) The method of claim 16, wherein the scheduled duration is an integer multiple of a minimum scheduled duration.

24. (canceled)

25. (previously presented) The method of claim 16, wherein the scheduling period is variable.

26. (previously presented) The method of claim 16, wherein the scheduled duration is variable.

27. (previously presented) The method of claim 25, wherein the scheduled rate is variable.

28. (previously presented) The method of claim 26, wherein the scheduled duration is based on priority of a station.

29. (previously presented) The method of claim 26, wherein the scheduled duration is based on a maximum supportable rate.

30. (previously presented) The method of claim 29, wherein the scheduled duration is the longest possible duration for the maximum supportable rate.

31. (previously presented) The method of claim 28, wherein the priority of the station is based on channel conditions.

32. (previously presented) The method of claim 28, wherein the priority of the station is based on the rate requested.

33. (previously presented) The method of claim 28, wherein the priority of the station is based on throughput allocated.

34. (currently amended) A base station for scheduling data transmissions, comprising:

an antenna;

a receiver configured to receive a rate request via the antenna;

a controller configured to determine a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and

a transmitter configured to transmit the rate assignment,

wherein the receiver is further configured to receive data for the scheduled duration at the scheduled rate,

wherein the scheduled duration is less than or equal to a scheduling period, the scheduling period being an interval of time after transmission of [[which]] the rate assignment is made.

35. (currently amended) A mobile station for transmitting data, comprising:

a controller configured to generate a [[rate]] request for a rate if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested;

an antenna;

a transmitter configured to transmit the [[rate]] request for the rate via the antenna; and

a receiver configured to receive a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration,

wherein the transmitter is further configured to transmit data, the transmitted data responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate.

36. (currently amended) An apparatus for scheduling data transmissions, comprising:

a receiver configured to receive a rate request;

a controller configured to determine a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and

transmitter configured to transmit the rate assignment,

wherein the receiver is further configured to receive data for the scheduled duration at the scheduled rate,

wherein the scheduled duration is less than or equal to a scheduling period, the scheduling period being an interval of time after transmission of [[which]] the rate assignment is ~~made~~.

37. (currently amended) An apparatus for transmitting data, comprising:

a controller configured to generate a [[rate]] request for a rate if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested;

a transmitter configured to transmit the [[rate]] request for the rate; and

a receiver configured to receive a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration,

wherein the transmitter is further configured to transmit data, the transmitted data responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate.